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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/543,663	04/05/2000	Roland Lamer	15-IS-5288(70191/235)	7305
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Steven C Becker Foley & Lardner firstar Center			EXAMINER	
			FRENEL, VANEL	
777 East Wisconsin Avenue Milwaukee, WI 53202-5367			ART UNIT	PAPER NUMBER
			3626	
		DATE MAILED: 09/12/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

-	Application No.	Applicant(s)			
• • •	09/543,663	LAMER ET AL.			
Office Action Summary	Examin r	Art Unit			
	Vanel Frenel	3626			
The MAILING DATE of this communication appears on the cover sheet with the correspondenc address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status					
1) Responsive to communication(s) filed on 2	5 July 2003 .				
2a) ☐ This action is <b>FINAL</b> . 2b) ☑	This action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims					
4)⊠ Claim(s) <u>1-11 and 19-31</u> is/are pending in t	ne application.				
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-11 and 19-31</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9)☐ The specification is objected to by the Examiner.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.					
If approved, corrected drawings are required in reply to this Office action.					
12) The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:					
1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
14) Acknowledgment is made of a claim for dome	stic priority under 35 U.S.C. § 11	9(e) (to a provisional application).			
a) ☐ The translation of the foreign language p 15)☐ Acknowledgment is made of a claim for dome					
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Inform	nary (PTO-413) Paper No(s) nal Patent Application (PTO-152)			
U.S. Patent and Trademark Office PTO-326 (Rev. 04-01) Office	Action Summary	Part of Paper No. 12			

Application/Control Number: 09/543,663 Page 2

Art Unit: 3626

#### **DETAILED ACTION**

## **Notice to Applicant**

### Continued Examination Under 37 CFR 1.114

- 1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/25/03 has been entered.
- 2. This communication is in response to the amendment filed 07/25/03. Claims 1-11, and 19-31 are pending.

#### Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-11 and 19-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong et al (6,260,021) in view of Mukherjee (6,314,415).

(A) As per claim 1, Wong discloses a data management system for patient data, comprising:

a first component having a functionality code segment and a user interface code segment (Col.8, lines 65-67 to Col.9, line 21);

a second component having a functionality code segment and a user interface code segment (Col.8, lines 65-67 to Col.9, line 21);

and a container application having a first user interface layer in communication with the first component and a second user interface layer in communication with the second component (Col.6, lines 1-55). Wong does not explicitly disclose wherein the first and second user interface layers are configured to convert the first user interface code segment of the first component and the second user interface code segment of the second component to a uniform user interface and to communicate patient data between the functionality code segments of the first and second components, respectively, and the uniform user interface.

However, this feature is known in the art, as evidenced by Mukherjee. In particular, Mukherjee teaches the first and second user interface layers are configured to convert the first user interface code segment of the first component and the second user interface code segment of the second component to a uniform user interface and to communicate patient data between the functionality code segments of the first and

Art Unit: 3626

second components, respectively, and the uniform user interface (See Mukherjee,

Col.11, lines 37-67 to Col.12, line 67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Mukherjee within the system of Wong with the motivation of providing features that facilitate data entry, avoid redundant and unnecessary information from graphical user interfaces, and permit changes to the user interfaces (and resulting forms) without relying on "hardcoded" software (See Mukherjee, Col.2, lines 19-24).

- (B) As per claim 2, Wong discloses the data management system wherein the functionality code segment of the first component is configured to store and retrieve patient image data (Col.10, lines 13-27).
- (C) As per claim 3, Wong discloses the data management system wherein the functionality code segment of the second component is configured to store and retrieve patient text data (Col.1, lines 52-59).
- (D) As per claim 4, Wong discloses the data management system wherein the first and second user interface layers are configured to format the patient data from the first and second functionality code segments with the same look and feel (Col.3, lines 31-60).

- (E) As per claim 5, Wong discloses the data management system, the container further comprising a first service layer in communication with the first component and a second service layer in communication with the second component, wherein the first and second service layers are configured to communicate data between the functionality code segments of the first and second components and a service (Col.12, lines 65-67 to Col.13, line 59).
- (F) As per claim 6, Mukherjee discloses the data management system wherein the service includes a telecommunication service (See Mukherjee, Col.6, lines 55-67).
- (G) As per claim 7, Wong discloses a data management system for patient data, comprising: a first application for retrieving patient image data from a database and having a first user interface (Col.10, lines 13-47);

a second application for processing patient text data and having a second user interface (Col.7, lines 1-58); and

Wong does not explicitly disclose a data manager in communication with the first and second applications, wherein the data manager includes a user interface code segment in communication with the first and second applications for converting the first user interface and the second user interface to a uniform user interface and for receiving the patient image data and patient text data for generating display signals based on the patient image data and the patient text data according to a predetermined display format.

Art Unit: 3626

However, this feature is known in the art, as evidenced by Mukherjee. In particular, Mukherjee teaches a data manager in communication with the first and second applications, wherein the data manager includes a user interface code segment in communication with the first and second applications for converting the first user interface and the second user interface to a uniform user interface and for receiving the patient image data and patient text data for generating display signals based on the patient image data and the patient text data according to a predetermined display format (See Mukherjee, Col.11, lines 37-67 to Col.12, line 67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Mukherjee within the system of Wong with the motivation of providing features that facilitate data entry, avoid redundant and unnecessary information from graphical user interfaces, and permit changes to the user interfaces (and resulting forms) without relying on "hardcoded" software (See Mukherjee, Col.2, lines 19-24).

- (H) As per claim 8, Wong discloses the data management system further comprising a display unit configured to receive the display signals and provide a display based on the display signals (Col.7, lines 29-37).
- (I) As per claim 9, Wong discloses the data management system wherein the predetermined display format has a look and feel for both the patient image data and the patient text data (Col.11, lines 17-64).

Art Unit: 3626

(J) As per claim 10, Wong discloses the data management system further comprising a third application configured to process data, the user interface code a segment in communication with the third application and configured to receive the data and to generate display signals based on the data (Col.13, lines 2-44).

- (K) As per claim 11, Wong discloses the data management system wherein the third application is in communication with the internet (Col.8, lines 53-67 to Col.9, line 21).
- (L) As per claim 19, Wong discloses a data management system for patient data, comprising:

first means for processing patient image data, the first means having a first user interface means (Col.10, lines 13-67 to Col.11, line 48);

second means for processing patient text data, the second means having a second user interface means (Col.11, lines 17-64; Col.14, lines 1-42). Wong does not explicitly disclose third means for communicating between the first and second means, for converting the first user interface means and the second user interface means to a uniform user interface and for displaying the patient image data and patient text data according to a predetermined display format.

However, this feature is known in the art, as evidenced by Mukherjee. In particular, Mukherjee suggests third means for communicating between the first and second means, for converting the first user interface means and the second

Art Unit: 3626

user interface means to a uniform user interface and for displaying the patient image data and patient text data according to a predetermined display format (See Mukherjee, Col.11, lines 37-67 to Col.12, line 67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Mukherjee within the system of Wong with the motivation of providing features that facilitate data entry, avoid redundant and unnecessary information from graphical user interfaces, and permit changes to the user interfaces (and resulting forms) without relying on "hardcoded" software (See Mukherjee, Col.2, lines 19-24).

- (M) As per claim 20, Wong discloses the data management system wherein the first means includes a PACS component (Col.1, lines 21-37).
- (N) As per claim 21, Wong discloses the data management system wherein the first means includes a user interface code segment, and the third means a includes a user interface layer in communication with the user interface code segment (Col.13, lines 1-44).
- (O) As per claim 22, Wong discloses a method of displaying patient data from a plurality of applications, comprising:

receiving patient image data using a first application having a first user interface (Col.11, lines 4-48);

Art Unit: 3626

receiving patient text data using a second application having a second user interface (Col.7, lines 1-58); converting the first user interface and the second user interface to a uniform user interface (See, Wong, Col.12, lines 6-62). Wong does not explicitly disclose configuring both the patient image data and patient text data according to a predetermined display format; and displaying the configured patient image data and patient text data.

However, this feature is known in the art, as evidenced by Mukherjee. In particular, Mukherjee suggests configuring both the patient image data and patient text data according to a predetermined display format; and displaying the configured patient image data and patient text data (See Mukherjee, Col.11, lines 37-67 to Col.12, line 67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Mukherjee within the system of Wong with the motivation of providing features that facilitate data entry, avoid redundant and unnecessary information from graphical user interfaces, and permit changes to the user interfaces (and resulting forms) without relying on "hardcoded" software (See Mukherjee, Col.2, lines 19-24).

(P) As per claim 23, Wong discloses the method further comprising receiving the patient image data from a PACS database (Col.1, lines 21-38).

(Q) As per claim 24, Mukherjee discloses the method wherein the predetermined display format includes a display format for an icon (See Mukherjee, Col.5, lines 30-67 to Col.6, line 54).

- (R) As per claim 25, Mukherjee discloses the method wherein the predetermined display format includes a display format for a menu (Col.7, lines 15-67 to Col.8, line52).
- (S) As per claim 26, Wong discloses the method further comprising communicating the patient image data through a user interface layer (Col.1, lines 65-67 to Col.2, line 37).
- (T) As per claim 27, Wong discloses the method further comprising providing patient image data to one of the internet and an intranet (Col.6, lines 44-55).
- (U) As per claim 28, Wong discloses the data management system further comprising a third component having a functionality code segment and a third user interface code segment, wherein the container application is configured to communicate patient between the functionality code segments of the first, second and third components, respectively, and the uniform user interface (Col.8, lines 15-67).

As per claim 29, Wong discloses the data management system wherein the (V) functionality code segment of the third component is configured to communicate with the Internet (Col.6, lines 44-55).

- (W) As per claim 30, Wong discloses the data management system wherein the service communications with the first and second service layers via a predetermined protocol (Col.8, lines 31-67).
- (X) As per claim 31, Wong discloses the data management system wherein the predetermined protocol includes componentware (Col.8, lines 53-67).

### Response to Arguments

5. Applicant's arguments with respect to claims 1-11, 19-31 have been fully considered but are moot in view of the new ground (s) of rejection.

Applicant's arguments filed 07/25/03 have been fully considered but they are not persuasive. Applicant's arguments will be addressed hereinbelow in the order in which they appear in the response filed 07/25/03.

(A) At pages 6-11 of the 07/25/03 response, Applicant argues that the newly added features in the 07/25/03 amendment are not taught or suggested by the applied references.

In response, all of the limitations which Applicant disputes as missing in the applied references, including the features newly added in the 07/25/03 amendment, have been fully addressed by the Examiner as either being fully disclosed or obvious in view of the collective teachings of Wong and/or Mukherjee, based on the logic and

Art Unit: 3626

sound scientific reasoning of one ordinarily skilled in the art at the time of the invention, as detailed in the remarks and explanations given in the preceding sections of the present Office Action. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck* & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In addition, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

#### Conclusion

- 6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited but not applied art teaches medical diagnostic report forming apparatus capable of attaching image data on report (5,581,460) and image data management system particularly for use in a hospital (5,586,262).
- 7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vanel Frenel whose telephone number is 703-305-4952. The examiner can normally be reached on 6:30am-5:00pm.

Application/Control Number: 09/543,663 Page 13

Art Unit: 3626

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on 703-305-9643. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

8. Any response to this action should be mailed to:

Please address mail to be delivered by the United States Postal Service (USPS) as follows:

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Hand-delivered responses should be brought to:

Crystal Park 5, 2451 Crystal Drive, Arlington, VA. 22202, 7<sup>th</sup> Floor (Receptionist).

**V.F** V.F

September 7, 2003

JOSEPH THOMAS

SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3600